

REMARKS**Status of the Claims**

Claims 1, 3-6, and 8-10 are currently present in the Application, and claim 1 is an independent claim. Claim 1 has been amended, claim 7 has been canceled, and no claims have been added in this response.

Applicants are not conceding that the subject matter encompassed by claims 1-20, prior to this and previous amendments, are not patentable over the art cited by the Examiner. Claim 1 was amended and claim 7 was canceled in this Amendment solely to facilitate expeditious prosecution of this Application. Applicants respectfully reserve the right to pursue claims, including the subject matter encompassed by claims 1-20 as presented prior to this and previous amendments, and additional claims in one or more continuing applications.

Examiner Interview

Applicants note with appreciation the telephonic interview conducted between Applicants' representative and the Examiner on August 19, 2008. During the telephonic interview, the Examiner and Applicants' representative discussed the 112 rejection and the 103 rejection per Applicants' representative's telephonic interview agenda. The Examiner stated that Applicants' specification supports Applicants' "determining" limitation and would remove the 112 rejection to claims 1, 3-6, and 8-10. In addition, the Examiner stated that the Examiner would allow Applicants' Application if Applicants' amend independent claim 1 based upon Applicants' representative's proposed amendments included in the telephonic interview agenda and include limitations of dependent claim 7 into independent claim 1. Such amendments are included in this response.

Claim Rejections - 35 U.S.C. § 112

Claims 1 and 3-10 stand rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement due to Applicants' "determining"

limitation found in independent claim 1. Claim 7 has been canceled in this response and, therefore, rejection to this claim is moot. In Applicants' specification on page 48, lines 4-25, Applicants discuss a determination to use a first scheduler and a second scheduler. Therefore, Applicants' specification supports Applicants' "determining" limitation found in Applicants' independent claim 1. As agreed upon during the telephonic interview, the Examiner will remove the 112 rejection to claims 1, 3-6, and 8-10 in the next Office communication.

Claim Rejections - Alleged Anticipation Under 35 U.S.C. § 103

Claims 1 and 3-10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCrory (U.S. Patent No. 6,513,057, hereinafter "McCrory") in view of Duault, et al. (U.S. Patent No. 5,428,781, hereinafter "Duault"). Applicants respectfully traverse these rejections. Claim 7 has been canceled in this response and, therefore, rejection to this claim is moot.

Applicants have amended independent claim 1 to further describe that Applicants analyze tasks included in an application in order to determine to use a first scheduler and a second scheduler. Support for this amendment may be found in Applicants' specification on page 46, line 30 through page 47, line 7 and, therefore, no new matter is added with such amendment. In addition, Applicants have included limitations found in dependent claim 7 into independent claim 1. As amended, claim 1 is a method claim for asymmetrically multithreading tasks in a computer environment that includes a plurality of dissimilar processors with limitations comprising:

- retrieving an application;
- analyzing a first task type and a second task type included in the application;
- in response to analyzing the first task type and the second task type, determining that the application requires both a first scheduler and a second scheduler, wherein the first scheduler is different than the second scheduler;
- scheduling, during execution of the application, a plurality of first tasks adapted to be executed by a first type of processor from the plurality of dissimilar processors, the scheduling performed by the

first scheduler that maintains a first run queue that includes data corresponding to the first tasks, the plurality of first tasks corresponding to the first task type;

- in response to the scheduling of the plurality of first tasks by the first scheduler, inserting the plurality of first tasks in the first run queue;
- scheduling, during the execution of the application, a plurality of second tasks adapted to be executed by a second type of processor from the plurality of dissimilar processors, the scheduling performed by the second scheduler that maintains a second run queue that includes data corresponding to the second tasks, wherein the first scheduler and the second scheduler are both utilized by the application during the application execution, and wherein the first task and the second task execute concurrently, the plurality of second tasks corresponding to the second task type;
- in response to the scheduling of the plurality of second tasks by the second scheduler, inserting the plurality of second tasks in the second run queue;
- informing the second type of processor to load one of the plurality of second tasks in response to the scheduling of the plurality of second tasks; and
- wherein the first scheduler and the second scheduler are both located on a first processor that is the first type of processor.

Applicants' first processor includes a first scheduler and a second scheduler, which are different schedulers. These two different schedulers are both operational during an application's execution. In contrast, McCrory teaches that a **single operating system** is solely responsible for scheduling tasks. McCrory states:

"An operating system, preferably stored in memory 332, is provided for scheduling tasks on processors 318, 320, 334, and 336. The operating system is responsible for scheduling the execution of process threads on the system processors 318, 320, 334, and 336." (col. 7, lines 26-29, emphasis added)

"For each new thread created, the HSMP OS determines the initial processor family to associate with that thread based on the binary code stream that the thread will begin executing." (col. 8, lines 12-14, emphasis added)

As can be seen from the above excerpts, McCrory only teaches the use of a single operating system to schedule tasks. which is different than utilizing a first scheduler and a second scheduler to schedule first tasks and second tasks, respectively, as claimed by Applicants.

In addition, Applicants determine that two different schedulers are required by analyzing the task types included in the application. In contrast, Duault teaches multiple schedulers on multiple devices because Duault's objective is to duplicate software tasks across multiple processes in order to "render the scheduling and execution of tasks capable of tolerating processor failures" (col. 2, lines 34-40). The combination of McCrory and Duault does not teach two different schedulers on one device, but rather teaches away from including different schedulers on a single device in order to tolerate processor failures.

In addition, independent claim 1 includes the limitation "*informing the second type of processor to load one of the plurality of second tasks in response to the scheduling of the plurality of second tasks,*" which was previously included in dependent claim 7. As agreed upon during the Examiner interview, neither McCrory nor Duault teach or suggest, either alone or in combination with each other, all the limitations included in Applicants' independent claim 1 as amended and, therefore, independent claim 1 is allowable over McCrory in view of Duault. Each of claims 3-6 and 8-10 are dependent, either directly or indirectly, upon independent claim 1. Therefore, each of claims 3-6 and 8-10 are allowable for at least the same reasons that independent claim 1 is allowable as discussed above.

Conclusion

As a result of the foregoing, it is asserted by Applicants that the remaining claims in the Application are in condition for allowance, and Applicants respectfully request an early allowance of such claims.

Applicants respectfully request that the Examiner contact the Applicants' attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

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